

KC780 Options

Hardware Installation Manual

Copyright © 1979 by Digital Equipment Corporation

The material in this manual is for informational purposes and is subject to change without notice.

Digital Equipment Corporation assumes no responsibility for any errors which may appear in this manual.

Printed in U.S.A.

This document was set on DIGITAL's DECset-8000 computerized typesetting system.

The following are trademarks of Digital Equipment Corporation, Maynard, Massachusetts:

DIGITAL	DECsystem-10	MASSBUS
DEC	DECSYSTEM-20	OMNIBUS
PDP	DIBOL	OS/8
DECUS	VAX	RSTS
UNIBUS	VMS	RSX
		IAS

CONTENTS

CHAPTER 1 INTRODUCTION

1.1	GENERAL	1-1
1.2	APPLICABLE DOCUMENTS	1-1
1.3	REMOTE DIAGNOSTIC OPTION VARIATIONS	1-1
1.4	HARDWARE REQUIREMENTS	1-1
1.5	SPECIFICATIONS	1-2
1.6	CUSTOMER REQUIREMENTS	1-3
1.6.1	System Configuration Worksheet	1-3
1.6.2	Telephone Company Notification	1-3
1.6.2.1	Discontinuance of Telephone Service	1-3
1.6.2.2	Customer Notice of Discontinued Telephone Service	1-3
1.6.2.3	Customer Notice of Telephone Service Changes	1-4
1.6.3	Customer Acknowledgement	1-4
1.6.4	Customer Responsibilities	1-4
1.7	MODEM RETURN/REPAIR	1-4

CHAPTER 2 INSTALLATION

2.1	GENERAL	2-1
2.2	UNPACKING AND INSPECTION	2-1
2.3	DLV11-E INTERFACE MODULE (M8017) REWORK	2-1
2.4	KC780-XX INSTALLATION PROCEDURES	2-3
2.5	DLV11-E CHECKOUT	2-7
2.6	MODEM CHECKOUT	2-8
2.7	REMOTE SYSTEM CHECKOUT	2-8
2.8	OPTION REMOVAL PROCEDURE	2-8

CHAPTER 3 PROBLEM REPORTING PROCEDURES

3.1	GENERAL	3-1
3.2	SYSTEM MALFUNCTION (HARD FAILURE)	3-1
3.3	SYSTEM MALFUNCTION (INTERMITTENT FAILURE)	3-2

APPENDIX A DLV11-E INTERCONNECTIONS

A.1	GENERAL	A-1
-----	---------------	-----

APPENDIX B OPTION-SUPPLIED MODEMS

B.1	GENERAL	B-1
-----	---------------	-----

APPENDIX C INSTALLATION ACKNOWLEDGEMENT

C.1	GENERAL	C-1
-----	---------------	-----

FIGURES

	Title
DLV11-E Jumper Locations (as shipped) for KC780-XX Option	2-2
KC780-XX Cabling	2-4
LSI-11 Module Layout After Installing KC780-XX Option	2-5
Cabinet Bulkhead Cable Connection (Rear).....	2-6
Modem Cabling	2-7
DLV11-E/Modem Signal Flow and Interconnection Diagram.....	A-2
GDC Jumper Configuration	B-1
Vadic Jumper Configuration and Switch Settings	B-2
Installation Acknowledgement Form.....	C-2

TABLES

	Title
KC780-BX Option Modem Data.....	1-3
Inventory List.....	2-1
DLV11-E (M8017) Factory Jumper Layout	2-3

CHAPTER 1

INTRODUCTION

1.1 GENERAL

This manual describes the installation and checkout of the KC780-XX Remote Diagnostic Option. The KC780-XX Remote Diagnostic Option is a VAX 11/780 Option. This option is used with the DIGITAL Diagnostic Center (DDC) resources to provide a VAX 11/780 system with remote system fault analysis and diagnosis.

Diagnosis is under the control of a host computer operated by the DDC Service Response Group (SRG). Access to a customer's system is possible only when a keyswitch is unlocked at the customer's system. Communication is automatically established on the communications line via an encoded message protocol. This line does not support voice communications or customer-initiated connections to the remote port.

1.2 APPLICABLE DOCUMENTS

The following documents are applicable to the installation of the Remote Diagnostic (RD) Option.

Document	Document Number
Electronic Industries Association (EIA) Standard Modem, Low Speed Asynchronous	RS-232
DLV11-E Operators Manual	DEC No. 3015949*
System Configuration Worksheets	EK-DLV11-OP
	EK-SMGDE-SC†

1.3 REMOTE DIAGNOSTIC OPTION VARIATIONS

Two variations of the Remote Diagnostic Option are available: KC780-BX and KC780-EA. The KC780-BX is the preferred version in the United States. The KC780-BX version includes a low speed asynchronous standalone modem with DAA and requires a customer-supplied RJ11C telephone company receptacle. The KC780-EA is required in Canada. The KC780-EA version requires a customer-supplied low speed asynchronous modem with DAA.

1.4 HARDWARE REQUIREMENTS

The KC780-XX Remote Diagnostic Option is installed in a VAX 11/780 Console System Cabinet. The option consists of:

- Modem, Low Speed Asynchronous with DAA (KC780-BX only)
- Interface Module, DLV11-E (M8017 and H315A Test Connector)
- Cable, 25 foot Round Modem Interface (BC05D-25)
- Cable, Filtered Plug Assembly (BC03L-05)
- Diskettes, RD Protocol

* Modem instruction manuals are supplied by the modem vendor and shipped with individual units.

† The System Configuration Worksheets package is available from Printing and Circulation Services. This package contains bus maps, interface layouts, and appliques for laying out system configurations.

Option supplied modems have a 14 foot telephone line interface cable and a 7 foot, 3-wire ac power cord. The telephone line interface cable contains a miniature 6-pin RJ11C plug.

1.5 SPECIFICATIONS

Interface Module, DLV11-E (M8017)

Power $+5.0 \text{ Vdc} \pm 5\% @ 1.0 \text{ A}$
 $+12.0 \text{ Vdc} \pm 3\% @ 0.18 \text{ A}$

Bus Loads ac 1.6
 dc 1.0

LSI-11 Bus

Loading One Bus Load

Modem, Low Speed Asynchronous

Transfer Rate 300 Baud

Selectable Option States Required

Certain modems such as the Raycal/Vadic and the GDC modems are shipped already conforming to the states listed here. Any other modem used with this option must be configured to the following function states. Reference the modem vendor's instruction manual to configure the modem's functions.

Option Description	Required State
Originate/Answer	ON
Automatic/Answer	ON
Data Set Ready	ON
Loss of Carrier Disconnect	OFF
Abort Timer Disconnect (17.0 s/minimum – 30.0 s/maximum)	ON
Receive Space Disconnect	OFF
Send Space Disconnect	OFF
Transmit Reversals in Manual Analog Loop	OFF
Answer Mode Indication	OFF
Early Data Set Ready	ON
Make Busy (CN Circuit)	OFF
Fail Safe State of CN	OFF
Common Ringer	OFF
RTS Control	DTE Mode
DTR Control	DTE Mode
Analog Loop	DTE Mode
Disconnect (Unattended)	DTE Mode
CB-CF (COM/SEP)	Separate
Grounding AA/AM COM/SEP	Common
Remote Telephone Operator (REM OPR)	Remote

1.6 CUSTOMER REQUIREMENTS

1.6.1 System Configuration Worksheet

A prospective customer site must be evaluated and a System Configuration Worksheet (EK-SMGDE-SC) must be supplied to DIGITAL's Diagnostic Center (DDC) before scheduling the installation of a KC780-XX Remote Diagnostic Option. A complete and accurate worksheet is necessary for DDC to build a configuration file.

1.6.2 Telephone Company Notification

The customer must furnish the following information to the telephone company before the installation of a KC780-BX Option.

1. Modem manufacturer's name
2. Modem model number
3. Modem FCC registration number
4. Modem ringer equivalence number
5. Modem speed
6. Modem voice jack direct-connect type receptacle
7. Telephone number of line/RJ11C, if already installed

Table 1-1 lists the modem data for the modems supplied with the KC780-BX Option.

Table 1-1 KC780-BX Option Modem Data

Modem Mfg.	Model Number	FCC Registration Number	Ringer Equiv. No.	Voice Jack Type	Speed bits/sec
GDC	103A3	AG697J-62418-DM-E	0.6B	RJ11C	300
Vadic	VA355P	AJ4964-70263-DM-N	1.0B	RJ11C	300

When the KC780-EA option is required, the customer must order both the phone line and the modem. The modem must be a Bell Model 103J or an equivalent.

1.6.2.1 Discontinuance of Telephone Service – Normally the modem should not disturb the telephone network. But if the telephone network malfunctions due to a defective modem, the local telephone company will discontinue service.

1.6.2.2 Customer Notice of Discontinued Telephone Service – If practical, the local telephone company will notify the customer before disconnecting service. However, the telephone company may not always be able to warn the customer that service will be discontinued.

If service is discontinued, the local telephone company should:

1. Notify the customer promptly that service has been discontinued.
2. Give the customer the opportunity to correct the situation which gave rise to the temporary discontinuation.
3. Inform the customer of his right to bring a complaint to the FCC. Complaint procedures can be obtained from the local telephone company or from the modem manufacturer.

1.6.2.3 Customer Notice of Telephone Service Changes – The local telephone company may change its equipment or procedures. These changes must be consistent with FCC regulations. If the changes can be expected to create any incompatibility between the customer terminal equipment and the new equipment or procedures, the customer shall be given adequate notice, in writing, to allow him the opportunity to maintain uninterrupted service.

1.6.3 Customer Acknowledgement

The customer must sign an Installation Acknowledgement form to ensure DIGITAL's full and free access to equipment. (Appendix C includes a sample form.)

1.6.4 Customer Responsibilities

The customer is responsible for preparing the system for remote diagnosis after installation of the VAX KC780-XX Remote Diagnostic Option. Preparation includes mounting the RD Protocol Diskettes, system diagnostic pack, and scratch media.

1.7 MODEM RETURN/REPAIR

Modems shipped with the KC780-BX Remote Diagnostic Option should be returned to Stockroom 126 in Woburn for repair and replacement. In the event one vendor's modem is replaced with a different vendor's (or even a different model type), the customer must notify the telephone company of the new FCC registration number, ringer equivalence, and other items listed in Paragraph 1.6.2.

The on-site Field Service Engineer is responsible for notifying the customer of the change and providing the technical information the customer must report to the local telephone company.

CHAPTER 2 INSTALLATION

2.1 GENERAL

This chapter provides the procedures necessary to install, checkout, and remove the KC780-XX Option. It includes Unpacking and Inspection, Option Installation Procedures, DLV11-E Checkout, Modem Checkout, and Remote System Checkout. Option Removal Procedures are also included.

2.2 UNPACKING AND INSPECTION

The shipping container must be carefully opened. Individual parts must be inventoried and inspected for damage. Any damage must be immediately reported to the responsible carrier and the branch office supervisor. Refer to Table 2-1 for an inventory list. Do not start installation if any item is missing or damaged; wait until the item is replaced or repaired.

Table 2-1 Inventory List

Part No.	Description	Quantity
3015949-00*	Low Speed Asynchronous Standalone Modem	1
BC03L-05	Filtered Cable Assembly	1
BC05D-25	Interface Cable, Asynchronous Modem	1
M8017	Interface Module, Asynchronous Modem	1
H315A	H315A Modem Test Connector	1
ZE016PY	Diagnostic Kit (RD)	1
7421885-00	Plate, Adapter	1
n/a	Asset Tag	1
EK-KC780-IN-001	KC780 Options, Hardware Installation Manual	1
EN-01392-07-N978(725)	Acknowledgement Form	1

* The KC780-EA option kit does not contain the standalone modem.

NOTE

The equipment listed in Table 2-1 remains the property of Digital Equipment Corporation at all times. An asset tag will be affixed to the BC03L-05 cable during installation of this option.

2.3 DLV11-E INTERFACE MODULE (M8017) REWORK

The DLV11-E interface module (Figure 2-1) must be reworked before installing the KC780-XX Remote Diagnostic Option. Table 2-2 shows the DLV11-E jumper configurations required for KC780-XX compatibility. Several items in the table are asterisked. The asterisks indicate which jumpers you must rework (insert or remove) from the state shipped to the state shown in Table 2-2.

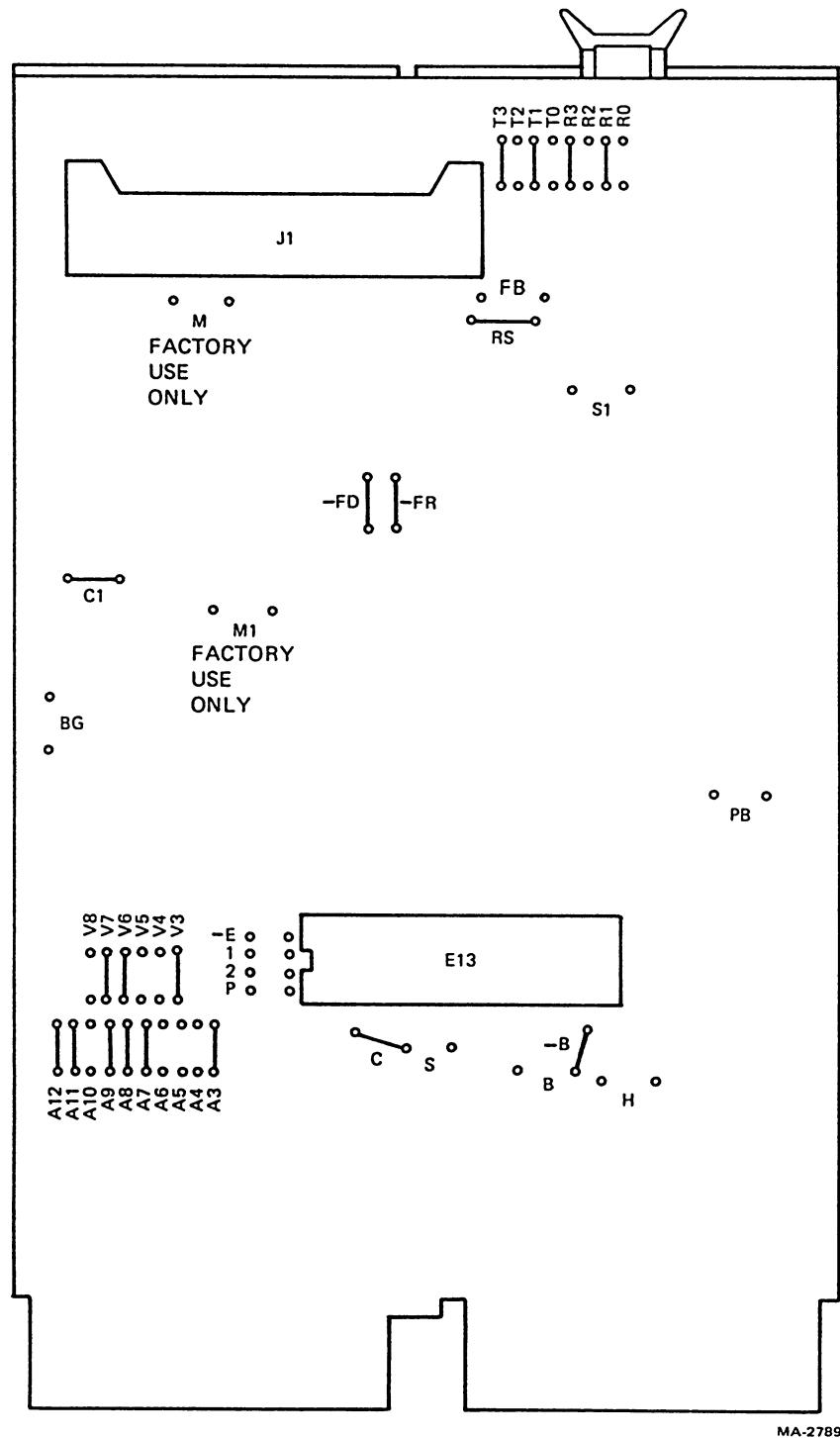


Figure 2-1 DLV11-E Jumper Locations (as shipped) for KC780-XX Option

Table 2-2 DLV11-E (M8017) Factory Jumper Layout

Jumpers In	Jumpers Out	Selected Function State
-	I and 2	8 data bits
-	P	No parity check
-	PB	PGM baud rates disabled
-	BG*	Break generation disabled
C, C1	S, S1	Common speed
-	H	No halt on framing error
-B	B	No boot on framing error
-FR	-	No force of req to send
-FD	-	No force of DTR
RS	-	Request To Send enabled
-	FB	Force busy disable
-	M, M1	Factory use only
R1*, T1*, R3, T3*	R0*, T0*, R2*, T2	Baud rate (300)
A3, A7, A8, A9, A11, A12	A4, A5, A6, A10	Address setup (775610 ₈)
V3*, V6, V7	V4, V5, V8	Vector setup (Vector 310 ₈)
-	-E	Parity type

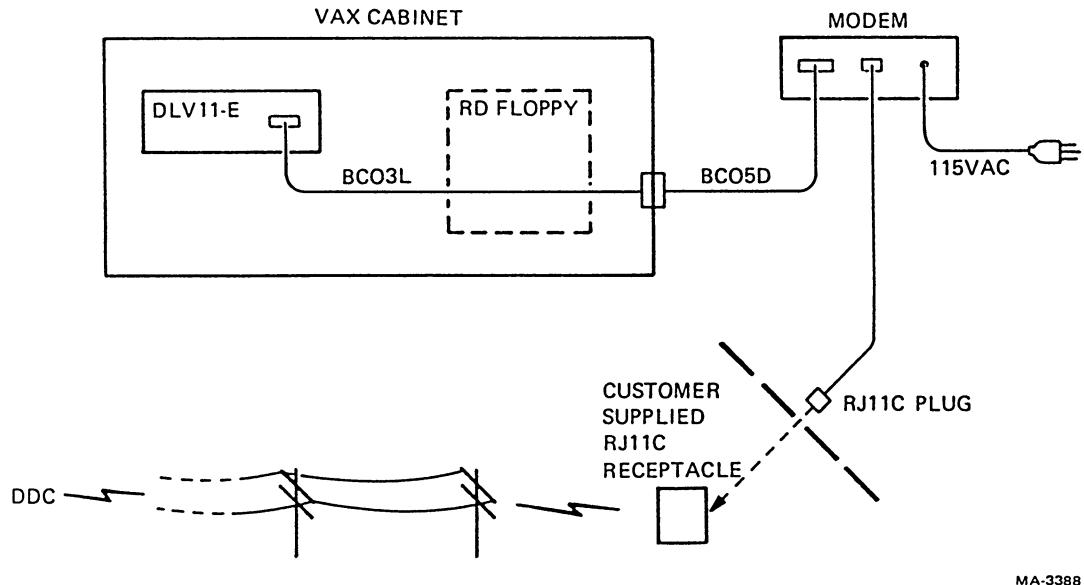
* This table shows the jumper configuration of the DLV11-E required for the option. The asterisked items must be altered to the state shown in this table for proper operation of the KC780-XX Remote Diagnostic Option.

2.4 KC780-XX INSTALLATION PROCEDURES

Install the KC780-XX by performing the following procedures. Refer to Figure 2-2 for the general connection and cabling layout.

1. Power down the system. Turn keyswitch to the OFF position.
2. Open system cabinet front doors for access to the LSI-11 mounting box located in the lower left hand corner of the cabinet.
3. Remove the left front door panel to allow installation of VAX 11/780 Remote Diagnostic Option.
4. Power down LSI-11 (if required).
5. Remove front panel bezel assembly from the LSI-11 mounting box.

A. KC780-BX OPTION



B. KC780-EA OPTION

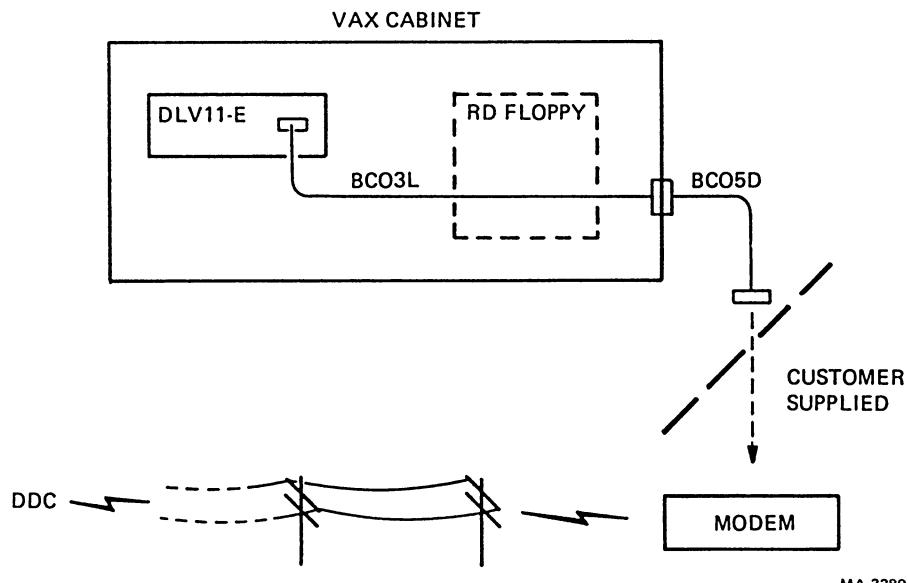


Figure 2-2 KC780-XX Cabling

6. Release and remove cable connector from the M7940 module (Figure 2-3).
7. Remove the M9400-YE module carefully. Reinstall in slot 4 (immediately below its old location) of the LSI-11 backplane.
8. Verify that the DLV11-E jumper configuration matches the description in Table 2-2. Then install DLV11-E (M8017) module in slot 3 of the LSI-11 backplane (old location of M9400-YE module).
9. Attach the cable connector adapter plate (P/N 7421885-00) to the BC03L-05 filtered plug cable connector (P/N 121256-0-0) using two 6-32 Kep Nuts (Figure 2-4).
10. Locate and trip ac circuit breakers on rear of the cabinet assembly to completely cut power.
11. Release the 1/4 turn captive retaining screws securing the blower-plenum to the rear of the cabinet. To remove, lift up on both sides of panel.
12. Route the BC03L-05 cable between the LSI-11 mounting box and the bus terminator module as shown in Figure 2-3.

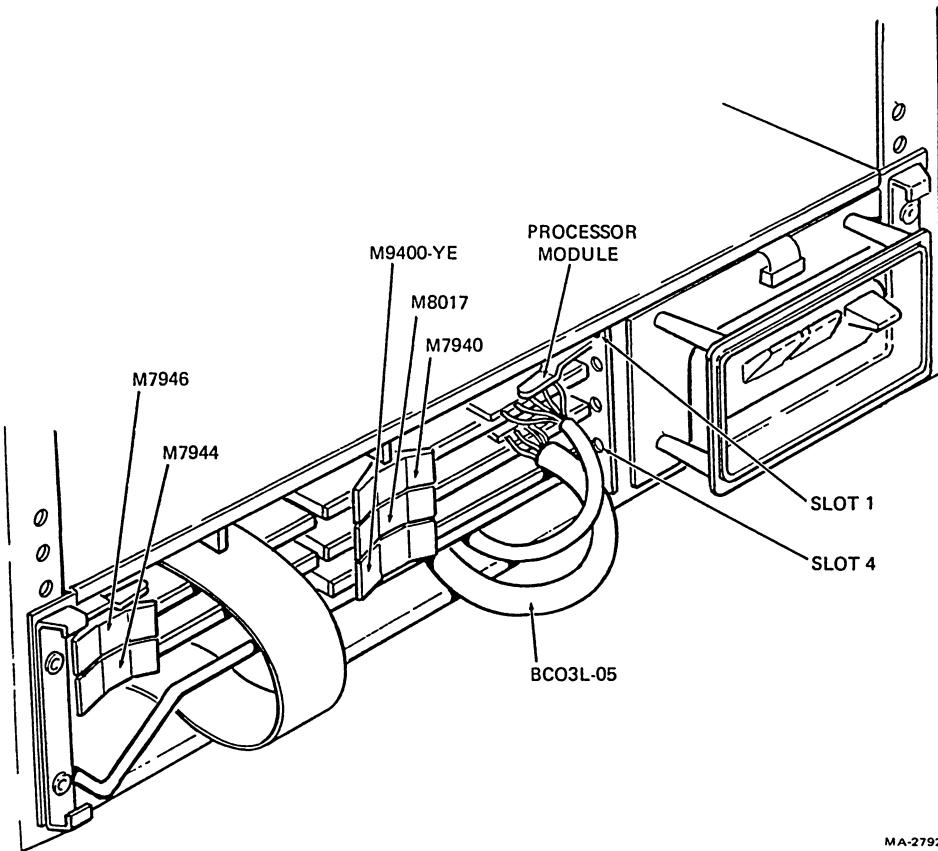


Figure 2-3 LSI-11 Module Layout After Installing KC780-XX Option

13. Connect the BC03L-05 cable connector and adapter plate to cabinet cut-out assembly (Figure 2-4).

NOTE

Adapter plate may not be required in later versions of the cabinet cut-out assembly.

14. Install asset tag around the BC03L-05 cable. Use the tie strap to secure the tag to the cable and tighten to prevent movement of the tag.
15. Install blower-plenum and secure.
16. Connect BC05D-25 interface cable cinch plug (P/N 1205886) to BC03L-05 feed-through connector and secure (Figure 2-4).
17. Return ac circuit breakers to On position to restore power.
18. Return to front of cabinet. Connect the BC03L-05 40-pin HSG connector (P/N 1210918-15) to the M8017 module. Ensure that the label THIS SIDE UP is facing in the correct direction before installing connector.

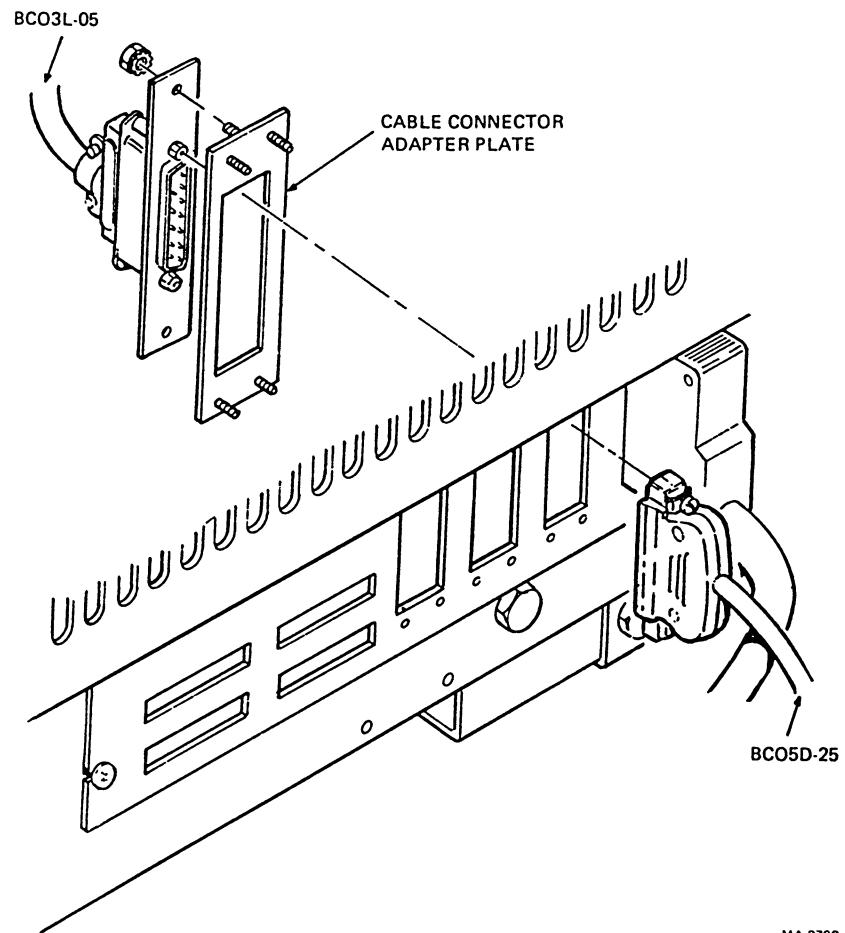


Figure 2-4 Cabinet Bulkhead Cable Connection (Rear)

19. Reinstall cable to the M7940 module that was removed in step 6.
20. Reinstall LSI-11 front panel assembly.

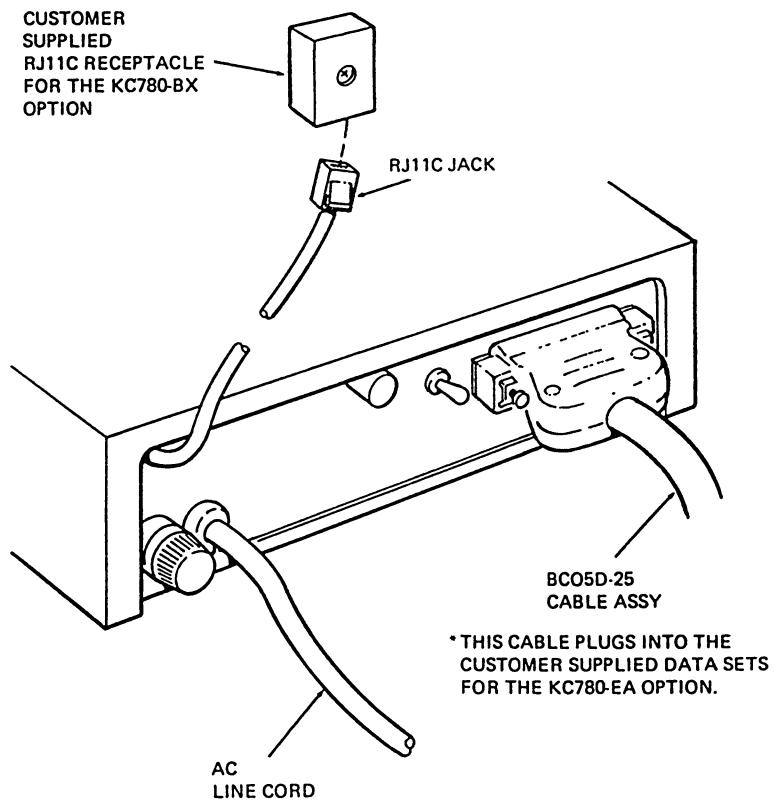
CAUTION

Modem ac power should not be derived from the 869 Power Distribution Box since this violates UL regulations and cabinet power integrity.

21. Route BC05D-25 (as required) and connect to the modem as illustrated in Figure 2-5. This modem is a free-standing unit that requires a 115 Vac power source.
22. Perform the DLV11-E Checkout in Paragraph 2.5.

2.5 DLV11-E CHECKOUT

The DLV11-E Offline Test Diagnostic Program is shipped with the VAX Diagnostic Set. This program must be run to verify the proper operation of the DLV11-E module (M8017). The program runs on an LSI-11. The checkout procedure is performed as follows. If a malfunction is detected, contact the nearest DIGITAL Field Service office.



MA-2791

Figure 2-5 Modem Cabling

1. Power down system.
2. Disconnect the BC05D-25 cable connector from the feed-through connector (Figure 2-4).
3. Connect an H315A test connector into the free end of the filtered cable (BC03L-05).
4. Power up the system. Turn keyswitch to the ON position.
5. Load and start MAINDEC-11-DVDVA (DLV11-E Off-line Test).
6. When the program has been successfully completed, power down system.
7. Disconnect the H315 terminator from the interface cable (BC05D-25).
8. Reconnect the interface cable (BC05D-25) to the modem.

2.6 MODEM CHECKOUT

Refer to Appendix A to determine DLV11-E/Modem signal flow and interconnections. Appendix B contains switch settings and jumper information for option-supplied modems. Refer to the vendor's documentation for additional information and checkout procedures.

2.7 REMOTE SYSTEM CHECKOUT

The following steps must be performed after installing the KC780-XX Remote Diagnostic Option. This procedure allows system checkout with DDC.

1. Release and open floppy disk drive housing and insert the KC780 Remote Diagnostic Microdiagnostic #2 floppy.
2. Apply ac power to modem.
3. Reset circuit breakers on rear of cabinet and power up the LSI-11 (if required).
4. Turn keyswitch to the LOCAL position to power up system. Ensure the AUTO-RESTART switch is in the OFF position.
5. Load and boot the RD Microdiagnostic #2 floppy and turn keyswitch to REMOTE.
6. Implement or reference the modem checkout procedure in the vendor supplied manual or by dialing in from a local phone (Paragraph 2.6).
7. Schedule customer demonstration with DDC (Telephone 800-525-6570 in the United States or 303-599-4000 in Canada).
8. Wait for DDC call. Stand by for further participation as required.

2.8 OPTION REMOVAL PROCEDURE

The following procedures must be conducted when it becomes necessary to remove the KC780-XX Option. Basically, removal is accomplished by reversing the installation procedures. Ensure that the asset tag is returned with the option when it is being removed from the system.

1. Power down system. Turn keyswitch to the OFF position.
2. Open system cabinet front doors for access to the LSI-11 mounting box located in the lower left hand corner of the cabinet.

3. Remove the left front door panel to allow removal of VAX 11/780 Remote Diagnostic Option.
4. Power down LSI-11 (if required).
5. Remove LSI-11 front panel assembly.
6. Locate and trip ac circuit breakers on rear of the cabinet to completely cut power.
7. Release and remove cable connector from the M7940 module (Figure 2-3).
8. Disconnect the BC03L-05 connector from the M8017 module.
9. Remove the M8017 module from slot 3.
10. Remove the M9400-YE module from slot 4 and reinstall in slot 3.
11. Disconnect the BC05D-25 cable connector from the feed-through connector (Figure 2-4).
12. Remove the blower-plenum at the rear of the cabinet.
13. Remove the BC03L-05 cable connector and adapter plate from cut-out assembly (Figure 2-4).
14. Remove the BC03L-05 cable.
15. Reinstall blower-plenum and secure.
16. Reinstall cable to M7940 module that was removed in step 7.
17. Reinstall LSI-11 front panel assembly.
18. Reinstall left front door panel.
19. Ensure that the asset tag is removed.

BLANK

CHAPTER 3

PROBLEM REPORTING PROCEDURES

3.1 GENERAL

This chapter provides the procedure for reporting system malfunctions to DIGITAL's Service Response Group (SRG) at the DIGITAL Diagnosis Center (DDC).

During diagnostic testing the DDC has complete control of the system being tested. This allows the remote engineer to boot the system, perform I/O functions, and enter the TALK state to print information on the terminal or solicit information from the system terminal user.

If it becomes necessary for the user to answer queries or operate the system to duplicate a fault condition, the Service Response Group will notify the user by telephone to monitor the system terminal for instructions.

3.2 SYSTEM MALFUNCTION (HARD FAILURE)

A hard failure is a continuous error that cannot be cleared and is usually caused by a hardware problem. If this type of error occurs, proceed as follows.

1. Determine what option or device has failed.
2. Telephone DIGITAL's Diagnostic Center as directed below and provide the necessary information.
 - a. The DDC can be reached by the following number.
Outside Colorado: dial 1-800-525-6570
Inside Colorado: dial 1-800-332-7189
Local area code: dial 1-303-599-4000
 - b. The DDC will need the following information.
Customer name (company)
Caller's name and phone number
Address and location of system
System type and serial number
Description of problem
Device and device number on which diagnostic medium (tape or disk) is mounted.
Password and account number.
3. The DDC will determine if remedial diagnostic testing is required. If remedial diagnostic testing is not required, the DDC will have the local branch office schedule a service call to perform corrective action. If testing is required, the SRG will contact the local branch office and the user will be instructed to perform the following steps.
 - a. Remove all system software media from system if necessary. The VMS diagnostic pack will be required for RD sessions.
 - b. Mount scratch media for all options and devices to be tested.

- c. Load your special DDC diagnostic medium on the appropriate device and boot RD floppy diskette.
- d. Turn the VAX 11/780 cabinet keyswitch to the REMOTE position. The REMOTE indicator will light.
- e. DDC will inform the local branch office that the user's system is being tested.
- f. No actions are required during diagnosis by the user unless notified by telephone or the system terminal.
- g. After completing the test, the DDC computer will disconnect, and a message will print on the user system terminal indicating the end of the session.
- h. The SRG informs the local branch office of the source of the problem and the remedial action to be taken.
- i. The local branch office then contacts the user and schedules corrective action.

3.3 SYSTEM MALFUNCTION (INTERMITTENT FAILURE)

An intermittent failure is defined as an irregular fault caused by hardware or software problems. These problems are generally difficult to define and duplicate.

When an intermittent problem occurs, an integral software support unit at the DDC assists the DDC engineering group. This team may attempt to duplicate the problem and isolate system failures through the operating system but only at the customer's discretion. If this type of error occurs, the following procedure will be conducted unless otherwise directed.

1. Turn the VAX 11/780 cabinet keyswitch to the LOCAL position. The REMOTE indicator will be out.
2. Unload scratch media and install system operating software media.
3. Boot the system.
4. Turn the keyswitch to the REMOTE-DISABLE position. The REMOTE indicator will light.
5. Notify the DDC that the system is ready for testing.
6. The DDC will require the customer's account number and password before proceeding with tests.
7. The DDC will log on to the system.
8. With the keyswitch in the REMOTE-DISABLE position and the system software running, the system terminal will log commands and messages transmitted by the DDC engineer. The system terminal keyboard is disabled to prevent intervention by the system user.
9. The Service Response Group will inform the local branch office of the problem description and whether or not DDC is able to isolate the failure. The local branch office will schedule corrective action.
10. The local branch office will decide (in all cases) the course of action to satisfy customer requests for service.

APPENDIX A

DLV11-E INTERCONNECTIONS

A.1 GENERAL

Figure A-1 shows the DLV11-E/Modem signal flow and interconnections. It also shows the Filter Cable Assembly (BC03L-05) and the Modem Interface Cable (BC05D-25).

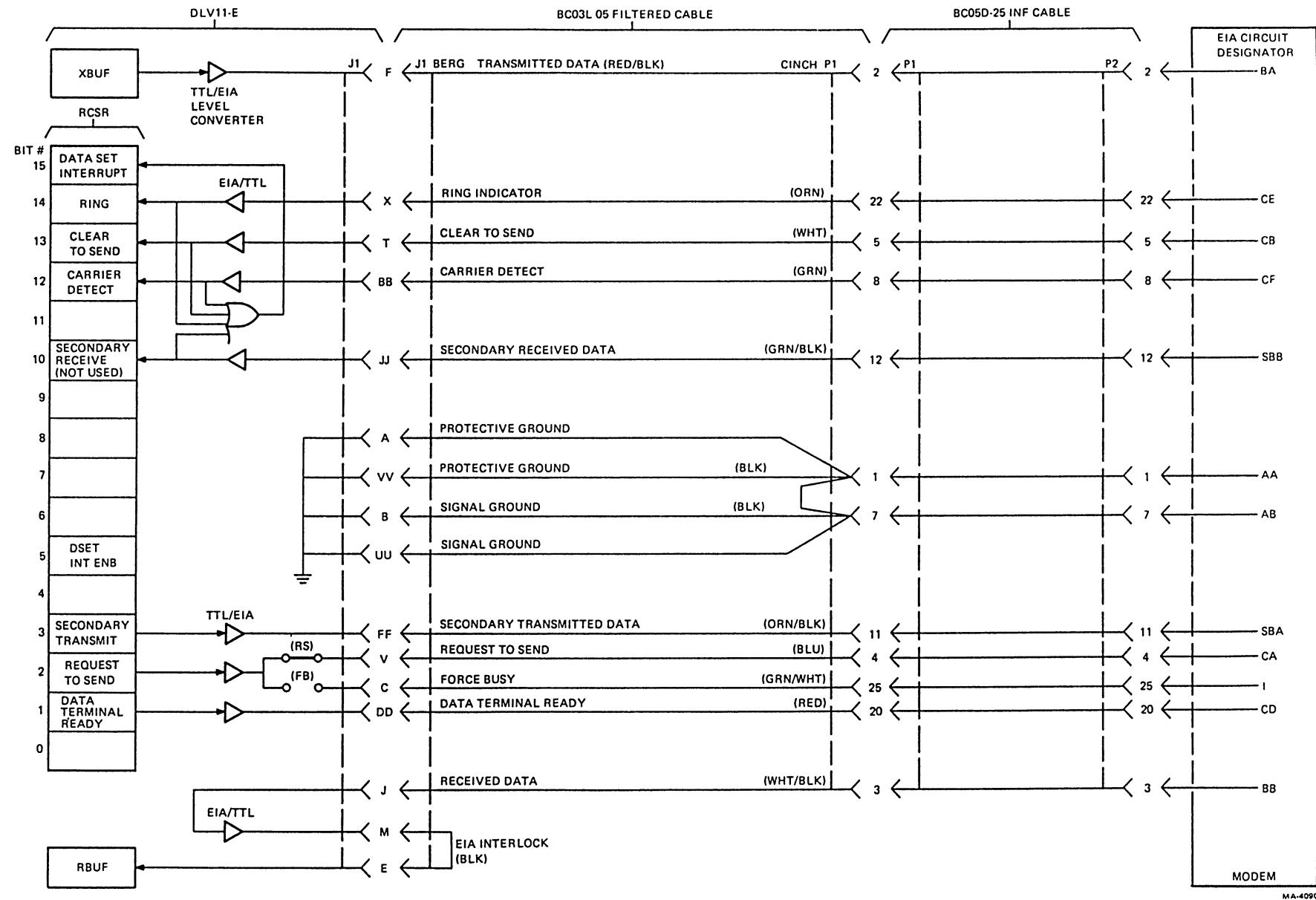


Figure A-1 DLV11-E/Modem Signal Flow and Interconnection Diagram

APPENDIX B OPTION-SUPPLIED MODEMS

B.1 GENERAL

One of two types of modems is generally supplied with the KC780-BX Option: General Data Comm (GDC) or Raycal/Vadic. Figures B-1 and B-2 are provided to show GDC modem jumper data and Raycal/Vadic modem jumper and switch settings. *These drawings are provided for information only.* The manufacturer's manual should be referenced before altering jumper or switch settings. All such alterations must be made by a qualified person.

CAUTION

CAUTION
It is an FCC violation to modify, change, or make
repairs to the modem unless done by a duly author-
ized FCC representative.

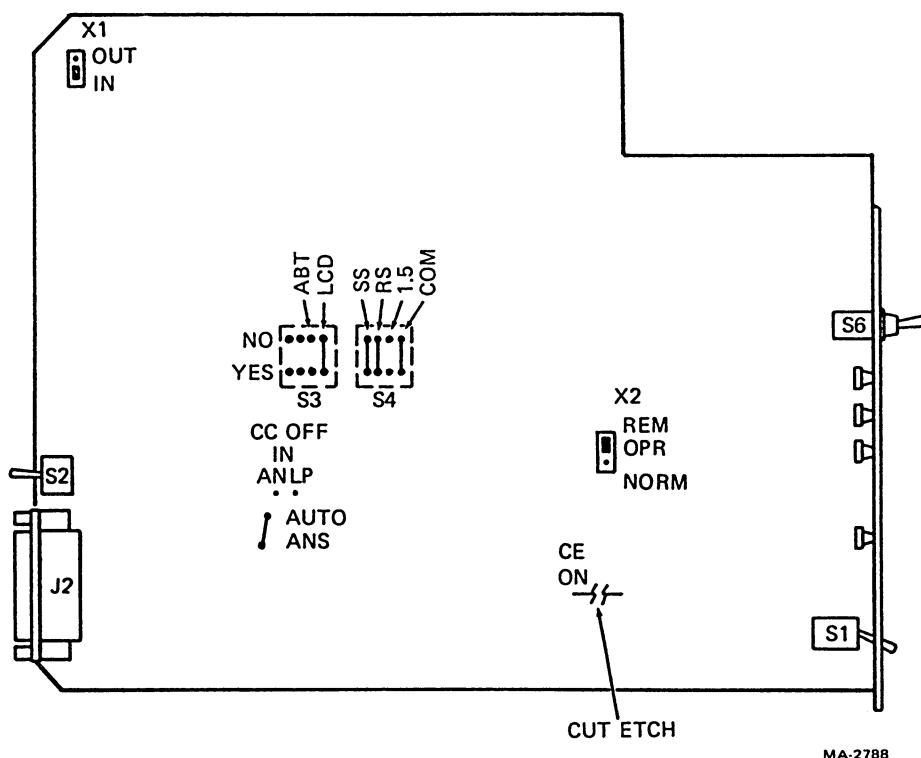
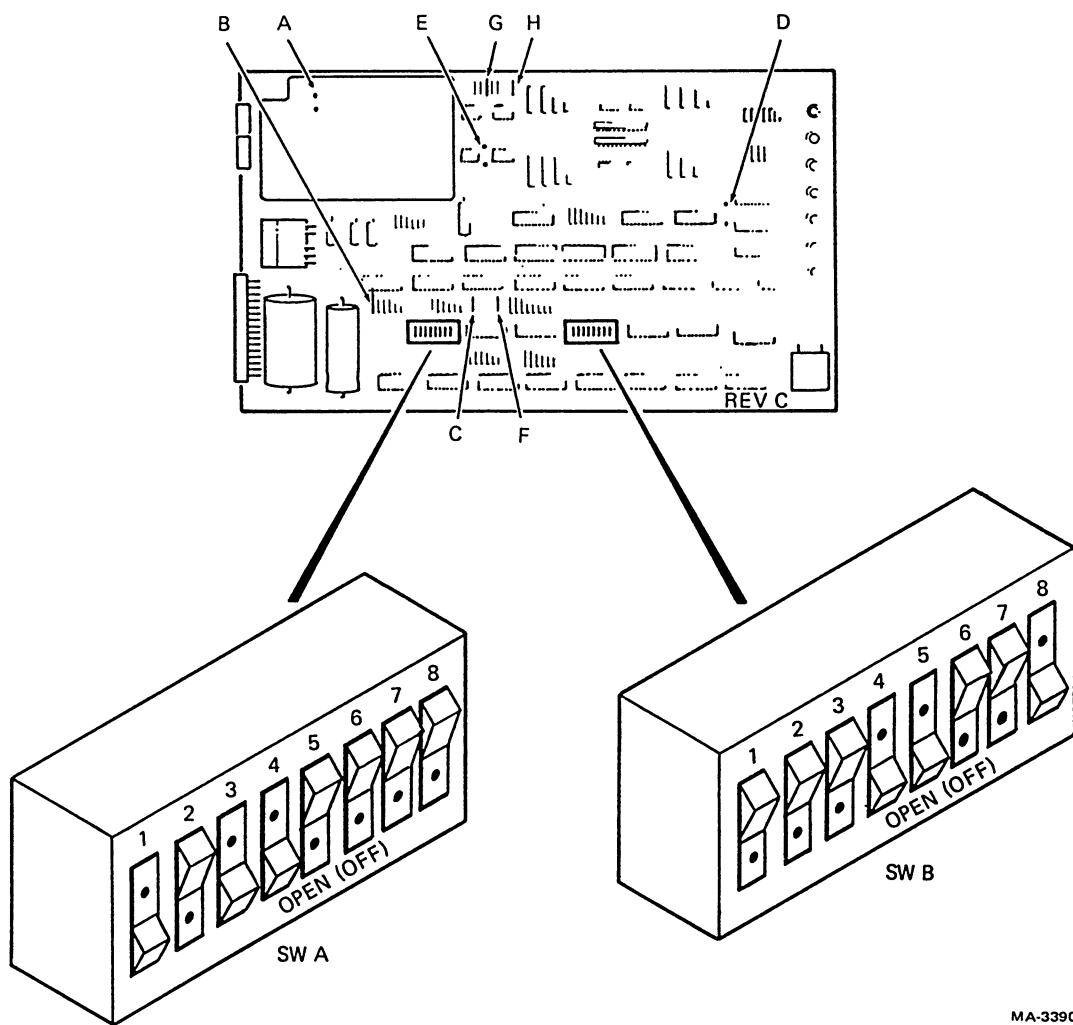


Figure B-1 GDC Jumper Configuration

RAYCAL/VADIC MODEM

OPTION JUMPER	JUMPER		CONFIGURATION
	IN	OUT	
A		*	*
B	*		
C	*		
D			*
E			*
F	*		
G	*		
H	*		



MA-3390

Figure B-2 Raycal/Vadic Jumper Configuration and Switch Settings

APPENDIX C

INSTALLATION ACKNOWLEDGEMENT

C.1 GENERAL

Figure C-1 shows an Installation Acknowledgement form. This form must be signed by a customer to ensure DIGITAL's full and free access to equipment.

digital
DIGITAL EQUIPMENT CORPORATION

VAX 11/780 REMOTE DIAGNOSIS INSTALLATION ACKNOWLEDGEMENT

I, the undersigned, acknowledge receipt of Remote Diagnosis Kit (KC780),
Asset No. for use on VAX 11/780,
Serial No.

I recognize that this Remote Diagnosis Kit always remains the property of
Digital Equipment Corporation, and agree not to remove or tamper with any part
of it, nor to disclose or make any part of it available to a third party.

I further acknowledge that I will allow Digital full and free access for the
purpose of removal of the Diagnosis Kit and restoration of the system to its
original condition if for any reason the Field Service Agreement should be
terminated.

Computer System to be located at: _____

Company _____

Address _____

City _____ *State* _____ *Zip Code* _____

*By Authorized
Representative* _____ *Date* _____

Title _____

EN-01392-07-N978(725)

Figure C-1 Installation Acknowledgement Form

Your comments and suggestions will help us in our continuous effort to improve the quality and usefulness of our publications.

What is your general reaction to this manual? In your judgement is it complete, accurate, well organized, well written, etc? Is it easy to use? _____

What features are most useful? _____

What faults or errors have you found in the manual? _____

Does this manual satisfy the need you think it was intended to satisfy? _____

Does it satisfy *your* needs? _____ Why? _____

Please send me the current copy of the *Technical Documentation Catalog*, which contains information on the remainder of DIGITAL's technical documentation.

Name _____ Street _____
Title _____ City _____
Company _____ State/Country _____
Department _____ Zip _____

Additional copies of this document are available from:

Digital Equipment Corporation
Accessories and Supplies Group
Cotton Road
Nashua, NH 03060

Attention *Documentation Products*
Telephone 1-800-258-1710

Order No. _____ EK-KC780-IN-001

----- Fold Here -----

----- Do Not Tear - Fold Here and Staple -----

digital



No Postage
Necessary
if Mailed in the
United States

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO.33 MAYNARD, MA

POSTAGE WILL BE PAID BY ADDRESSEE

Digital Equipment Corporation
Educational Services Development and Publishing
129 Parker Street, PK3-1/T12
Maynard, MA 01754

